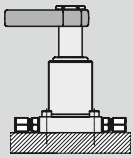
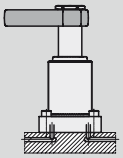
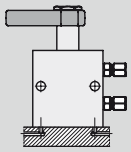
ROEMHELD
HILMA ▪ STARK

Program summary

SWING CLAMPS

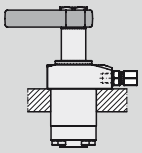
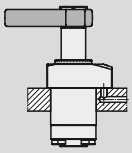
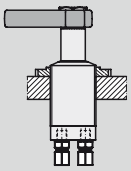
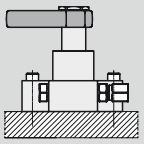
- up to operating pressures of 500 bar
- single and double acting
- 7 different body types
- maximum clamping force from 0.6 to 41 kN
- maximum clamping stroke from 7 to 50 mm
- overload protection device reinforced swong mechanism
- position monitoring metallic wiper

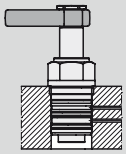
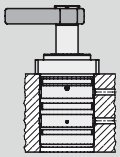
Program summary SWING CLAMPS

Body type	Flange at the bottom									Block		
Hydraulic connection	Pipe thread					Drilled channels				Pipe thread Drilled channels		
												
Overload protection device	–	●				–			–	●		
Reinforced or sturdy swing mechanism	● *	–				●			●	–		
												
Data sheet												
• double acting	B 1.849	B 1.881				B 1.8811			B 1.8812	B 1.890		
• single acting	B 1.8491	B 1.881				–			–	–		
Max. operating pressure	350 bar	500 bar				500 bar			500 / 160 bar (2)	500 bar		
Position monitoring	–					❍			❍	–		
Seat of clamping arm	cone	cone				cone			pendulum eye / fork head	cone		
Sealings / Wiper	NBR/FKM	NBR/FKM				NBR/FKM			NBR/FKM	NBR/FKM		
Max. operating temperature	+100 °C	+100 °C				+100 °C			+100 °C	+100 °C		
Metallic wiper	–	❍ *				❍			❍	–		
Approx. value clamping time for the shortest stroke	0.25 s	1 s				0.75 s			0.75 s	1 s		
Piston rod diameter	10 mm	20	32	40	50 mm	32	40	50 mm	20	32 mm	20	32	50 mm
Piston diameter	14 mm	25	40	50	63 mm	40	50	63 mm	25	40 mm	25	40	63 mm
Max. clamping force (1)	2.2 kN	2.8	6.8	10.5	16.5 kN	6.8	10.5	16.5 kN	4.4 / 1.4	11.2/3.6 kN (2)(3)	2.8	6.8	16.5 kN
Clamping stroke for double-acting version	8 mm	11 25 50	14 25 50	15 25 50	15 mm 25 mm 50 mm	22	20	20 mm	25	22 mm	7	8	11 mm
Max. flow rate for clamping	5 $\frac{cm^3}{s}$	3	10	18	28 $\frac{cm^3}{s}$	20	36	55 $\frac{cm^3}{s}$	8	20 $\frac{cm^3}{s}$	3	10	28 $\frac{cm^3}{s}$

Legende:
- ● **Series production**
- ❍ **Option**
- – **not available**
- * **only for double-acting version**

(1) with the pictured one-sided series clamping arm with contact bolt; with shorter clamping arms or double clamping arms considerably higher clamping forces can be obtained (maximum 41 kN)
(2) version with pendulum eye 500 bar / fork head 160 bar
(3) at max. operating pressure and double clamping arm per side
(4) only for double-acting version with O-ring sealing
(5) standard version with metallic wiper edge

Flange at the top													Thread				Screw on		
Pipe thread					Drilled channels								Pipe thread				Pipe thread		
																			
–	●				–			–					●			●	●		
●*	–				●			●					–			–	–		
																			
B 1.849 **B 1.8491**	**B 1.880** **B 1.880**				**B 1.8801** **–**			**B 1.8802** **–**					**B 1.881** **B 1.881**			**B 1.883** **B 1.883**	**–** **B 1.885**		
350 bar	500 bar				500 bar			500 / 160 bar (2)					500 bar			500 bar	500 bar		
–	–				❍			❍					–			–	–		
cone	cone				cone			pendulum eye / fork head					cone			cone	cone		
NBR / FKM	NBR / FKM				NBR / FKM			NBR / FKM					NBR/FKM			NBR / FKM	NBR / FKM		
+100 °C	+100 °C				+100 °C			+100 °C					+100 °C			+100 °C	+100 °C		
❍ (4)	❍ *				❍			❍					❍ *			❍ *	–		
0.25 s	1 s				0.75 s			0.75 s					1 s			1 s	1 s		
10 mm	20	32	40	50 mm	32	40	50 mm	20	32 mm				20	32	40	50 mm	20 mm	20	32	50 mm
14 mm	25	40	50	63 mm	40	50	63 mm	25	40 mm				25	40	50	63 mm	23 mm	25	40	63 mm
2.2 kN	2.8	6.8	10.5	6.5 kN	6.8	10.5	16.5 kN	4.4 / 1.4	11.2/3.6 kN (2)(3)				2.8	6.8	10.5	16.5 kN	3.6 kN	2.3	5.8	14 kN
8 mm	11 25 50	14 25 50	15 25 50	15 mm 25 mm 50 mm	22	20	20 mm	25	22 mm				11 25 50	14 25 50	15 25 50	15 mm 25 mm 50 mm	7 mm	7	8	11 mm
5 $\frac{cm^3}{s}$	3	10	18	28 $\frac{cm^3}{s}$	20	36	55 $\frac{cm^3}{s}$	8	20 $\frac{cm^3}{s}$				3	10	18	28 $\frac{cm^3}{s}$	1.5 $\frac{cm^3}{s}$	3	10	28 $\frac{cm^3}{s}$

Threaded-body									Cartridge					
Drilled channels									Drilled channels					
														
–	–	●	●		–				●				–	
●	●*	–	–		●				–				●	
														
B 1.848 **–**	**B 1.849** **B 1.8491**	**B 1.891** **B 1.891**	**B 1.892** **B 1.892**		**B 1.8921** **–**				**B 1.8803** **–**				**B 1.852** **–**	
150 bar	350 bar	500 bar	500 bar		500 bar				500 bar				350 bar	
–	–	–	–		❍				–				❍	
cylindrical	cone	cone	cone		cone				cone				cone	
FKM	NBR / FKM	NBR / FKM	NBR / FKM		NBR / FKM				NBR / FKM				NBR / FKM	
+150 °C	+100 °C	+100 °C	+100 °C		+100 °C				+100 °C				+100 °C	
(5)	❍ *	–	❍ *		❍				❍				❍	
0.2 s	0.25 s	1 s	1 s		0.75 s				1 s				0.2 s	
6 mm	10 mm	20 mm	20	32	50 mm	32	50 mm		20	32	40	50 mm	16	20 mm
10 mm	14 mm	23 mm	25	40	50 mm	40	63 mm		25	40	50	63 mm	23	28 mm
0.6 kN	2.2 kN	4.0 kN	2.8	6.8	16.5 kN	6.8	16.5 kN		2.8	6.8	10.5	16.5 kN	4,5	6 kN
8 mm	8 mm	7 mm	11	14	15 mm	22	20 mm		11 25	14 25	15 25	15 mm 25 mm	12	12 mm
6 $\frac{cm^3}{s}$	5 $\frac{cm^3}{s}$	1.5 $\frac{cm^3}{s}$	3	10	28 $\frac{cm^3}{s}$	20	55 $\frac{cm^3}{s}$		3	10	18	28 $\frac{cm^3}{s}$	10	14 $\frac{cm^3}{s}$